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cont.

material and said separator, a sheet-cut form of adhesion-added, colored film comprising a separator, an adhesive layer and a colored film, a sheet-cut form of colored adhesive film comprising said separator, a colored adhesive layer and a second supporting film and a sheet-cut form of adhesion added-antireflection film comprising said separator, an adhesive layer and an antireflection film.

In the Drawings:

Please amend FIGS. 3(B), 4(A), 4(B), 5(B), 10(B), 11(A), 11(B), and 12(B) as indicated in red on the drawing sheets attached herewith.

REMARKS

Reconsideration is respectfully requested.

It is proposed that FIGS. 3(B), 4(A), 4(B), 5(B), 10(B), 11(A), 11(B), and 12(B) of the drawings be amended in the manner indicated in red in the accompanying copies thereof. These amendments are to correct typographical errors. If the Examiner approves of these amendments, they will be incorporated in formal drawings that will be filed when this application has been allowed. A separate letter to the Draftsperson in accordance with MPEP §608.02(r) is also enclosed.

Claims 1-11 are pending in this application of which claims 1, 3, 5, 8, 10 and 11 have been amended.

The Examiner rejects claims 3-7, 10 and 11 as being indefinite under 35 U.S.C. §112, second paragraph. In response,

applicants herein add language to claims 3, 5, 10 and 11 that should overcome these (adding "second", "third" and "fourth" before the word "separator" in certain places in the claims). Also, claims 3 and 5 are amended to indicate the lamination is on the opposite side, in response to the question the Examiner raised related to claims 3-7. Since claims 4, 6 and 7 depend from either claims 3 or 5, this point is believed to have been addressed. It is respectfully requested that this rejection thus be withdrawn in view of the above noted amendments and remarks.

Claims 1 and 7 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Weber et al, U.S. patent 5,470,662. Applicants respectfully traverse. The Weber et al document really doesn't appreciate the system and method of the present invention as claimed. First, consideration of the document leaves the impression that the process described therein is a manual, one time process, to test whether the construction described in the patent was feasible. However, in order to clarify the distinction, applicants have amended claim 1 to indicate that a plurality of pre-cut sized sheets and substrates are employed, fed iteratively. Claims 1 and 7 are therefore submitted to be allowable.

Claims 1 and 7 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Monroe et al, U.S. patent 4,942,112. In this document, the Examiner notes at col. 6, line 33 and following that a film is cut and mounted by hand to a glass plate. Again, as noted above in regard to the previous

rejection, this document does not appreciate the claimed invention, wherein the film has been sheet-cut and the substrates and film are fed, one after another. The amendments to claim 1 noted clarify this distinction, and it is respectfully submitted that the claims are neither taught nor suggested by Monroe et al.

Claims 1, 2 and 7 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Monroe et al or Weber et al. Again, it is applicants' position that these documents, whether considered alone or whether combined, neither teach nor suggest what applicant's are claiming.

Claims 1-7 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Ueda (JP 09-0954539) in view of Monroe. Applicants earlier obtained an English translation of this document via the Japanese Patent Office machine translation system, and have cited it to the Examiner on July 25, 2001. Ueda (JP 09-0954539) is the document described in the background of the invention of the present application.

In making this rejection, the Examiner mentions that the process may be done by hand. It is respectfully submitted that the iterative nature of applicants' claimed process, defines over and is outside of the scope of the teachings or suggestions of Monroe and Ueda, whether considered alone or combined. As noted in the background of the invention, the present invention overcomes production issues that became apparent with the Ueda process (mentioned at page 3, line 19 and following of the

specification). It is therefore respectfully submitted that the claims should be allowed.

In paragraph 8 of the Office Action, claims 8 and 10-11/8 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Brady, U.S. patent 5,328,546. Applicants respectfully traverse the rejection. Brady shows a rolled form tacky transport tape 40 which the Examiner seems to equate to the substrate of the claims of the present application. However, claim 8 adds iterative feed language, and also adds that the substrates are discrete and that the sheet cut films are from a supply of plural sheet-cut films. It is respectfully believed that this distinguishes over the Brady continuous transport tape.

Paragraphs 9 and 10 of the Office Action make further rejections of claims 8 and 10-11/8 and claims 8-11 with Brady as the principal reference, adding Ueda and Garber (U.S. patent 4,464,221) and Platzer et al (U.S. patent 5,269,873). Applicants respectfully traverse and submit that these additional combined documents would not add anything to teach claim 8 as amended.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

In light of the above noted amendments and remarks, this application is believed in condition for allowance and notice

thereof is respectfully solicited. The Examiner is urged to contact applicants' attorney at 503-224-0115 if there are any questions.

Respectfully submitted,

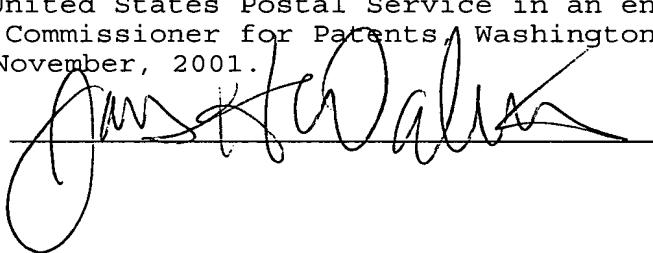


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MARKUP SHEETS SHOWING CLAIM AMENDMENTS MADE HEREIN

1. (Amended) A hologram-recording dry plate fabrication process comprising steps of:

providing a supply of plurality of sheets of a sheet-cut form of hologram recording photosensitive film comprising a supporting film, a hologram recording photosensitive material and a separator;

iteratively feeding ones of a substrate from a supply having a plurality of substrates,

iteratively feeding [a] ones of said sheet-cut form of hologram recording photosensitive [comprising a supporting film, a hologram recording photosensitive material and a separator] film,

releasing said separator from said fed ones of said sheet-cut form of hologram-recording photosensitive film, and

laminating said ones of said sheet-cut form of hologram-recording photosensitive film from which said separator is released on one surface of said fed substrate from a hologram recording photosensitive material side.

3. (Amended) The hologram-recording dry plate fabrication process according to claim 1 or 2, which comprises steps of:

feeding a sheet-cut form of adhesion-added light absorption film comprising a second separator, an adhesive layer and a light absorption film or a sheet-cut form of light absorption adhesive

film comprising a third separator, a light absorption adhesive layer and a second supporting film,

releasing said second or third separator from said fed adhesion-added light absorption film or said fed light absorption adhesive film, and

laminating said adhesion-added light absorption layer or light absorption adhesive film from which said second or third separator is released on [one surface] the opposite side of said fed substrate from an adhesive layer or light absorption adhesive layer side.

5. (Amended) The hologram-recording dry plate fabrication process according to claim 1 or 2, which comprises steps of:

feeding a sheet-cut form of adhesion-added, colored film comprising a second separator, an adhesive layer and a colored film, a sheet-cut form of colored adhesive film comprising a third separator, a colored adhesive layer and a supporting film or a sheet-cut form of adhesion-added antireflection film comprising a fourth separator, an adhesive layer and an antireflection film,

releasing said second, third, or fourth separator from said fed adhesion-added, colored film, said fed colored adhesive film or said fed adhesion-added antireflection film, and

laminating said fed adhesion-added, colored film, colored adhesive film or adhesion-added antireflection film from which said second, third, or fourth separator is released on [one

surface] the opposite side of said fed substrate from an adhesive layer or colored adhesive layer side.

8. (Amended) A hologram-recording dry plate fabrication system comprising:

a substrate feeding means for iteratively feeding ones of a discrete substrate,

a film feeding means for feeding from a supply of plural sheet-cut form film, discrete ones of a sheet-cut form of film having a separator,

a separator releasing means for releasing said separator from said fed film, and

a lamination means for laminating said film from which said separator is released on one surface of said fed substrate from the side of the film from which the separator is released.

10. (Amended) The hologram-recording dry plate fabrication system according to claim 8 or 9, wherein said film is any one of a sheet-cut form of hologram-recording photosensitive film comprising a supporting film, a hologram-recording photosensitive material and [a] said separator, a sheet-cut form of adhesion-added light absorption film comprising a separator, an adhesive layer and a light absorption film and a sheet-cut form of light absorption adhesive film comprising [a] said separator, a light absorption adhesive layer and a supporting film.

11. (Amended) The hologram-recording dry plate fabrication system according to claim 8 or 9, wherein said film is any one of a sheet-cut form of hologram recording photosensitive film comprising a supporting film, a hologram-recording photosensitive material and [a] said separator, a sheet-cut form of adhesion-added, colored film comprising a separator, an adhesive layer and a colored film, a sheet-cut form of colored adhesive film comprising [a] said separator, a colored adhesive layer and a second supporting film and a sheet-cut form of adhesion added-antireflection film comprising [a] said separator, an adhesive layer and an antireflection film.

photosensitive film feeding step, the separator is released from the thus fed hologram-recording photosensitive film at the separator-releasing step and the hologram-recording photosensitive film from which the separator is released is 5 laminated from the hologram-recording photosensitive material side onto one surface of the thus fed substrate. That is, since the sheet-cut form of hologram-recording photosensitive film is fed, a roll form of film having a separator is not susceptible to film defects by a guide roller, etc., which 10 are found when it is intermittently fed. In addition, since the fabrication process does not have any sheet-cutting step because of the use of a sheet-cut form of hologram-recording photosensitive film, there is neither generation nor deposition of dust due to sheet-cutting. It is thus possible 15 to provide a hologram-recording drying plate fabrication process that can be used to fabricate a dry plate for recording a transmission or reflection hologram particularly suitable for applications where high precision and high cleanliness are needed.

20 As recited in claim 2, the present invention provides a hologram-recording dry plate fabrication process according to claim 1, wherein said separator-releasing step and/or said lamination step are carried out while said substrate and/or said hologram-recording photosensitive film are vertically supported. Since the separator-releasing step and/or the 25 lamination step are carried out while the substrate and the hologram-recording photosensitive film are vertically supported according to the invention recited in claim 2, it

likely
is less unlikely that falling dust is deposited on the dry plate. It is thus possible to provide a hologram-recording drying plate fabrication process that can be used to fabricate a dry plate for recording a transmission or 5 reflection hologram particularly suitable for applications where high precision and high cleanliness are needed.

As recited in claim 3, the present invention provides a hologram-recording dry plate fabrication process according to claim 1 or 2, which comprises steps of:

10 feeding a sheet-cut form of adhesion-added light absorption film comprising a separator, an adhesive layer and a light absorption film or a sheet-cut form of light absorption adhesive film comprising a separator, a light absorption adhesive layer and a supporting film,
15 releasing said separator from said fed adhesion-added light absorption film or said fed light absorption adhesive film, and

laminating said adhesion-added light absorption layer or light absorption adhesive film from which said separator is 20 released on one surface of said fed substrate from an adhesive layer or light absorption adhesive layer side.

According to the invention recited in claim 3, since the sheet-cut form of adhesion-added light absorption film or light absorption adhesive film is fed, a roll form of film 25 having a separator is not susceptible to film defects by a guide roller, etc., which are found when it is intermittently fed. In addition, since the fabrication process does not have any sheet-cutting step because of the use of a sheet-cut

form of film, there is neither generation nor deposition of dust due to sheet-cutting. It is thus possible to provide a hologram-recording drying plate fabrication process that can be used to fabricate a dry plate for recording a transmission 5 or reflection hologram particularly suitable for applications where high precision and high cleanliness are needed.

As recited in claim 4, the present invention provides a hologram-recording dry plate fabrication process according to claim 3, wherein said separator-releasing step and/or said 10 lamination step are carried out while said substrate and said adhesion-added light absorption film or said light absorption adhesive film are vertically supported.

Since the separator-releasing step and/or the laminating step are carried out while the substrate and said adhesion- 15 added light absorption film or said light absorption adhesive film are vertically supported according to the invention recited in claim 4, it is less ~~unlikely~~^{likely} that falling dust is deposited on the dry plate. It is thus possible to provide a hologram-recording drying plate fabrication process that can 20 be used to fabricate a dry plate for recording a transmission or reflection hologram particularly suitable for applications where high precision and high cleanliness are needed.

As recited in claim 5, the present invention provides a hologram-recording dry plate fabrication process according to 25 claim 1 or 2, which comprises steps of:

feeding a sheet-cut form of an adhesion-added colored film comprising a separator, an adhesive layer and a colored film, a sheet-cut form of colored adhesive film comprising a

As recited in claim 6, the present invention provides a hologram-recording dry plate fabrication process according to claim 5, wherein said separator-releasing step and/or said lamination step are carried out while said substrate and said 5 adhesion-added colored film, said colored adhesive film or said adhesion-added antireflection film are vertically supported.

Since the separator-releasing step and/or the laminating step are carried out while the substrate and said adhesion-10 added colored film, said colored adhesive film or said adhesion-added antireflection film are vertically supported according to the invention recited in claim 6, it is less ~~unlikely~~ ^{likely} that falling dust is deposited on the dry plate. It is thus possible to provide a hologram-recording drying plate 15 fabrication process that can be used to fabricate a dry plate for recording a transmission or reflection hologram particularly suitable for applications where high precision and high cleanliness are needed.

As recited in claim 7, the present invention provides a 20 hologram-recording dry plate fabrication process according to any one of claims 1 to 6, wherein said hologram-recording photosensitive material comprises a photopolymer having adhesion.

According to the invention recited in claim 7, it is 25 possible to provide a hologram-recording dry plate fabrication process wherein the hologram-recording photosensitive material comprises a photopolymer having adhesion.

particularly suitable for applications where high precision and high cleanliness are needed.

As recited in claim 9, the present invention provides a hologram-recording dry plate fabrication system according to 5 claim 8, which further includes a means for supporting the fed substrate vertically and a means for supporting the fed film vertically, so that while the substrate and/or the film are vertically supported, the separator is released from the film by the separator releasing means and the film is 10 laminated on the substrate by the lamination means.

Since, according to this invention, the separator is released from the film and the film is laminated on the substrate while the substrate and the film are vertically supported, it is less ~~unlikely~~ ^{likely} that falling dust is deposited 15 on the dry plate. It is thus possible to provide a hologram-recording drying plate fabrication process that can be used to fabricate a dry plate for recording a transmission or reflection hologram particularly suitable for applications where high precision and high cleanliness are needed.

20 As recited in claim 10, the present invention provides a hologram-recording dry plate fabrication system according to claim 8 or 9, wherein the film is any one of a sheet-cut form of hologram-recording photosensitive film comprising a supporting film, a hologram-recording photosensitive material 25 and a separator, a sheet-cut form of adhesion-added light absorption film comprising a separator, an adhesive layer and a light absorption film and a sheet-cut form of light